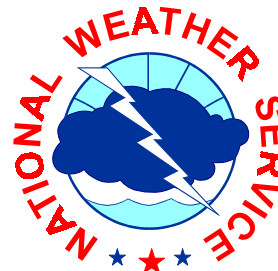


**NATIONAL WEATHER SERVICE
WESTERN REGION
SALT LAKE CITY, UTAH**



JULY 17, 2002

DEPUTY REGIONAL DIRECTOR

Recent Fire Weather and Heat Wave Activities: Fire activity in Western Region has increased dramatically in the past few days. Over 1,400 new fires have started since July 13. Fifty-nine of those fires have grown into large fires of over 100 acres. A total of 13 IMETS and two trainees are out on fires. We are expecting an additional four IMETS to be called up in the next 1-2 days. So far this year, we have dispatched IMETS to 80 fires. The average for this time of year is 36 IMET dispatches. We are even ahead of the year 2000, which was a record-breaking year. Eastern, Southern, and Central Regions are also providing IMETS to help us through this active period. From July 10-14, there were at least 46 temperature records tied or broken in Oregon, California, Nevada, Utah, and Montana. Thanks to all the offices for your support to the fire weather program and providing our customers information about the record-breaking heat.

METEOROLOGICAL SERVICES DIVISION

STATEMENT OF THE WEEK: This week's statement is an Airport Weather Warning (AWW) issued by forecaster Craig Ellis from WFO Phoenix for the Sky Harbor Airport. AWW was issued 35 minutes before two microbursts caused significant damage to aircraft and buildings. The wind damage caused the closure of the airport for four hours. The AWW is a short warning product that is tailored to specific criteria for the airport. This is an excellent example of how this product should be written. Good work Craig and the rest of the evening crew that worked the severe weather event.

WWUS85 KPSR 150257
AWWPHX
AZZ023-090330-

AIRPORT WEATHER WARNING FOR SKY HARBOR AIRPORT
NATIONAL WEATHER SERVICE PHOENIX AZ
755 PM MST SUN JUL 14 2002

...AIRPORT WEATHER WARNING FROM 815 PM MST UNTIL 915 PM MST...

THUNDERSTORM OUTFLOW FROM THE EAST WITH WIND GUSTS GREATER THAN 35 KNOTS ARE EXPECTED BETWEEN 815 AND 915 PM MST. VISIBILITY COULD DROP TO 1/4 MILE IN BLOWING DUST.

ELLIS

July 17, 2002

2

July 14th 800 pm – 900 pm (est)

Sky Harbor Airport Microburst Damage - Ground Zero 3001 Airline Rd just north of center north runway, at the Honeywell Bldg. Estimated winds 100 mph.



West side of Air Evac Bldg - Part of roof blown onto aircraft



Looking east on Airline Rd, north of Honeywell Bldg.



Empty Cargo Containers
Fiberglass 150-250 lbs
Aluminum 300-500lbs



Update on GFE Text Formatter Development Workshop: OS&T has tasked FSL to facilitate a workshop for the purpose of creating a set of baseline GFE text formatters for the ten core products. Western Region representatives to the August 6-8 workshop will be Tim Barker WFO Boise, Dennis Gettman WFO Medford, Chris Gibson WFO SLC, and Bill Schneider WFO Portland. An aggressive schedule has been set to get these baseline formatters to field offices by October 1.

HYDROLOGY AND CLIMATE SERVICES DIVISION

NWS Hydrologic Science Workshop Held: A workshop covering a wide variety of hydrologic science topics related to the NWS hydrology program was at in Silver Spring, MD June 17 through 21. The workshop featured presentations by the River Forecast Centers on their current development efforts and by Office of Hydrologic Development

personnel on development efforts in the areas of distributed modeling, snow and frozen ground hydrology, hydraulic routing, and Ensemble Streamflow Prediction. Significant workshop time was spent discussing Flash Flood Guidance (FFG). This discussion focused on two areas: short-term and long-term solution. In the short-term, it was agreed to form an RFC Development Manager team to specifically define problems with current FFG procedures and possible solutions. It was also suggested that the Western Region FFG Geographic Information Systems team be expanded to become more national in scope and representation. There was much interest from all parts of the country in the approach the WR FFG team has explored.

Distributed modeling research has provided some results that appear to be promising as a long-term solution to FFG. Many distributed models provide the capability of producing forecasts of water levels for locations upstream of the forecast point. This capability could be utilized in producing forecasts for specific locations and/or reaches of streams. Another particular area for further study is the derivation of channel routing parameters. These parameters may have use within the context of the existing threshold runoff/modernized FFG procedures.

Also of general interest from the workshop were the presentations concerning Multi-sensor Precipitation Estimator (MPE) and the new Dam Catalog (DAMCAT). Both of these procedures will be available to all field offices in AWIPS Build 5.2.2. MPE will provide offices with the capability of estimating precipitation over an area using radar, gages, and satellite input. Improvements to the first iteration of this tool are already under development with the goal of producing a tool that provides quality precipitation estimates over the entire country, even where radar coverage is non-existent. The update DAMCAT will provide web browser accessible information on dams and the ability to run a simple simplified dam break model. The tool will allow for the storage of multiple dam failure scenarios and has the capability of creating the text for quick product dissemination. The initial database package for each WFO will be supplied by OHD. Improvements of this initial version are under development and include an interface to edit informational database, a batch script for running scenarios, and a graphical display tool.

Latest El Nino Forecast: The latest ENSO Diagnostics Discussion, was issued by the Climate Prediction Center on July 11, 2002. Oceanic and atmospheric conditions, especially over the past few months, reflect that El Nino has officially developed in the Pacific Basin. Please refer to the ENSO Diagnostics Discussion for specific details and embedded links to CPC forecast tools and information:

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory. If you should need additional support or information with regard to El Nino or CPC's information, please contact Andrea Bair at Western Region Headquarters.

SCIENTIFIC SERVICES DIVISION

University of Utah Holds Ninth Annual Workshop on Weather Prediction in the Intermountain West November 7: The Ninth Annual Workshop on Weather Prediction in the Intermountain West will be held on Thursday, November 7, 2002, from 8:00 a.m.

to 5:00 p.m. at the Huntsman Cancer Institute at the University of Utah in Salt Lake City. The objectives of the annual workshops are to discuss major issues related to operational meteorology over the western United States and to foster interaction between researchers, applied meteorologists, and other professionals who rely on operational weather forecasts or data. The U of U is soliciting presentations from all facets of operational meteorology. The deadline for submitting a one paragraph abstract is September 6, with conference registration requested by October 18. Presentations are solicited from all aspects of operational meteorology, including fire weather, road weather, snow and avalanche studies, drought and the hydrological cycle in the West, or local forecast problems. Presentations may be requested to be given orally or as a poster. Since the workshop is limited to one day only, the number of oral presentations will be limited. Ample time will be given for the attendees to discuss posters with the presenters. Individuals interested in presenting or attending the workshop may register using an on-line registration form. A larger attendance than previous years is anticipated so please register as soon as possible. There are no fees associated with the Workshop. Further information is available on the Department of Meteorology web page at www.met.utah.edu.

The first board meeting of the CIRP Consortium for Intermountain Environmental Monitoring and Prediction will be held November 8. Contact John Horel or Jim Steenburgh for more information concerning the Consortium meeting.

Organization, Logistics, and Lodging: The workshop is being hosted by the NOAA Cooperative Institute for Regional Prediction. Attendees from beyond the Wasatch Front may contact the University Guest House at (888) 416-4075 for reservations. A limited number of rooms have been reserved for the "Weather Prediction Workshop" at a rate of \$69/night for November 6 and 7; reservations must be made by October 18. The Workshop will be held in the top floor auditorium of the Huntsman Cancer Institute. Parking is available in an underground parking garage; if possible, carpool if possible to save space for others (currently parking is free). Lunch will be available at the Point cafeteria on the same floor and range in price from \$3-\$10.

New Technical Attachment: This week's Technical Attachment (TA) is entitled "Chaff and the WSR-88D Precipitation Processing System," and is authored by Steve Vasiloff, NSSL/WR-SSD, Norman, OK/Salt Lake City, UT. The TA is located on the National Weather Service web site at <http://www.wrh.noaa.gov>, under "Technical Attachments."

SYSTEMS OPERATIONS DIVISION

Engineering Management Reporting System: Electronics Program Manager (EPM) Patrick Fahy attended a NWS Engineering Management Reporting System (EMRS) meeting at Alaska Region Headquarters last week. The meeting was very productive with many new ideas prioritized for future development. One of the new ideas that came from Western Region (WR) was a site-specific MY.EMRS portal design. The MY.EMRS portal will bring many pieces of maintenance related information together on one desktop in modular form. The WR MY.EMRS portal design concept will greatly enhance the NWS' ability to measure, manage, and improve maintenance. The

beginning stages of the portal implementation process will begin around July 15, 2002 with two WR offices incorporating the first build of the portal concept. All NWS offices will be switched to the interim portal by October 1, 2002. The enhanced MY.EMRS portal build is under development and will further improve the portal environment to make it more customizable and site specific. No date is set for roll out of the enhanced portal.

AWIPS: Western Region Headquarters has installed AWIPS R5.2.1. At this time 26 sites have completed the 5.2.1 install, and 20 sites have completed the R5.2.1.1 upgrade. The Linux pre-processor (LINUXPX) installation at Western Region Headquarters, originally scheduled for July 17, 2002 has been tentatively re-scheduled to July 24, 2002.

Western Region WAN Security: As part of Western Region's move to a more secure network/computing environment, the router that connects the Regional Office to the WAN is scheduled to be moved behind the Regional Office firewall on Wednesday, July 17, 2002.